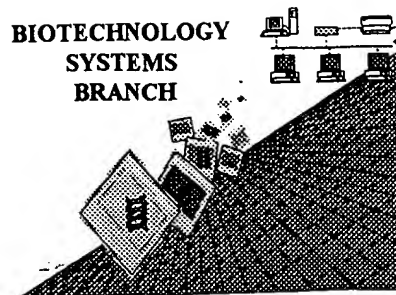


**RAW SEQUENCE LISTING**  
**ERROR REPORT**



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/617,099

Source: OPE

Date Processed by STIC: 7/27/2000

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**  
**<http://www.uspto.gov/web/offices/pac/checker>**

OIIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/617,099 DATE: 07/27/2000  
 TIME: 09:41:10

Input Set : A:\Sequence Listing.txt  
 Output Set: N:\CRF3\07272000\I617099.raw

3 <110> APPLICANT: Seino, Susumu; JCR Pharmaceuticals Co., Ltd.  
 5 <120> TITLE OF INVENTION: Protein Rim2  
 7 <130> FILE REFERENCE: GP35  
 C--> 8 <140> CURRENT APPLICATION NUMBER: US/09/617,099  
 C--> 8 <141> CURRENT FILING DATE: 2000-07-14  
 E--> 8 <160> NUMBER OF SEQ ID: 4

Does Not Comply  
 Corrected Diskette Needed

# ERRORED SEQUENCES

10 <210> SEQ ID NO: 1  
 11 <211> LENGTH: 1590  
 12 <212> TYPE: PRT  
 13 <213> ORGANISM: Mus musculus  
 15 <400> SEQUENCE: 1

16 Met Ser Ala Pro Leu Gly Pro Arg Gly Arg Pro Ala Pro Thr Pro Ala  
 17 1 5 10 15  
 19 Ala Ser Gln Pro Pro Pro Gln Pro Glu Met Pro Asp Leu Ser His Leu  
 20 20 25 30  
 22 Thr Glu Glu Glu Arg Lys Ile Ile Leu Ala Val Met Asp Arg Gln Lys  
 23 35 40 45  
 25 Lys Glu Glu Glu Lys Glu Gln Ser Val Leu Lys Ile Lys Glu Glu His  
 26 50 55 60  
 28 Lys Ala Gln Pro Thr Gln Trp Phe Pro Phe Ser Gly Ile Thr Glu Leu  
 29 65 70 75 80  
 31 Val Asn Asn Val Leu Gln Pro Gln Gln Lys Gln Pro Asn Glu Lys Glu  
 32 85 90 95  
 34 Pro Gln Thr Lys Leu His Gln Gln Phe Glu Met Tyr Lys Glu Gln Val  
 35 100 105 110  
 37 Lys Lys Met Gly Glu Glu Ser Gln Gln Gln Gln Glu Gln Lys Gly Asp  
 38 115 120 125  
 40 Ala Pro Thr Cys Gly Ile Cys His Lys Thr Lys Phe Ala Asp Gly Cys  
 41 130 135 140  
 43 Gly His Asn Cys Ser Tyr Cys Gln Thr Lys Phe Cys Ala Arg Cys Gly  
 44 145 150 155 160  
 46 Gly Arg Val Ser Leu Arg Ser Asn Lys Val Met Trp Val Cys Asn Leu  
 47 165 170 175  
 49 Cys Arg Lys Gln Gln Glu Ile Leu Thr Lys Ser Gly Ala Trp Phe Tyr  
 50 180 185 190  
 52 Asn Ser Gly Ser Asn Thr Leu Gln Gln Pro Asp Gln Lys Val Pro Arg  
 53 195 200 205  
 55 Gly Leu Arg Asn Glu Glu Ala Pro Gln Glu Lys Lys Ala Lys Leu His  
 56 210 215 220  
 58 Glu Gln Pro Gln Phe Gln Gly Ala Pro Gly Asp Leu Ser Val Pro Ala  
 59 225 230 235 240  
 61 Val Glu Lys Gly Arg Ala His Gly Leu Thr Arg Gln Asp Thr Ile Lys  
 62 245 250 255

## RAW SEQUENCE LISTING

DATE: 07/27/2000

PATENT APPLICATION: US/09/617,099

TIME: 09:41:10

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07272000\I617099.raw

```

64 Asn Gly Ser Gly Val Lys His Gln Ile Ala Ser Asp Met Pro Ser Asp
65      260      265      270
67 Arg Lys Arg Ser Pro Ser Val Ser Arg Asp Gln Asn Arg Arg Tyr Glu
68      275      280      285
70 Gln Ser Glu Glu Arg Glu Asp Tyr Ser Gln Tyr Val Pro Ser Asp Gly
71      290      295      300
73 Thr Met Pro Arg Ser Pro Ser Asp Tyr Ala Asp Arg Arg Ser Gln Arg
74 305      310      315      320
76 Glu Pro Gln Phe Tyr Glu Glu Pro Gly His Leu Asn Tyr Arg Asp Ser
77      325      330      335
79 Asn Arg Arg Gly His Arg His Ser Lys Glu Tyr Ile Val Asp Asp Glu
80      340      345      350
82 Asp Val Glu Ser Arg Asp Glu Tyr Glu Arg Gln Arg Arg Glu Glu Glu
83      355      360      365
85 Tyr Gln Ala Arg Tyr Arg Ser Asp Pro Asn Leu Ala Arg Tyr Pro Val
86      370      375      380
88 Lys Pro Gln Pro Tyr Glu Glu Gln Met Arg Ile His Ala Glu Val Ser
89 385      390      395      400
91 Arg Ala Arg His Glu Arg Arg His Ser Asp Val Ser Leu Ala Asn Ala
92      405      410      415
94 Glu Leu Glu Asp Ser Arg Ile Ser Leu Leu Arg Met Asp Arg Pro Ser
95      420      425      430
97 Arg Gln Arg Ser Val Ser Glu Arg Arg Ala Ala Met Glu Asn Gln Arg
98      435      440      445
100 Ser Tyr Ser Met Glu Arg Thr Arg Glu Ala Gln Gly Gln Ser Ser Tyr
101      450      455      460
103 Pro Gln Arg Thr Ser Asn His Ser Pro Pro Thr Pro Arg Arg Ser Pro
104 465      470      475      480
106 Ile Pro Leu Asp Arg Pro Asp Met Arg Arg Ala Asp Ser Leu Arg Lys
107      485      490      495
109 Gln His His Leu Asp Pro Ser Ser Ala Val Arg Lys Thr Lys Arg Glu
110      500      505      510
112 Lys Met Glu Thr Met Leu Arg Asn Asp Ser Leu Ser Ser Asp Gln Ser
113      515      520      525
115 Glu Ser Val Arg Pro Pro Pro Pro Arg Pro His Lys Ser Lys Lys Gly
116      530      535      540
118 Gly Lys Met Arg Gln Val Ser Leu Ser Ser Ser Glu Glu Glu Leu Ala
119 545      550      555      560
121 Ser Thr Pro Glu Tyr Thr Ser Cys Asp Asp Val Glu Leu Glu Ser Glu
122      565      570      575
124 Ser Val Ser Glu Lys Gly Asp Ser Gln Lys Gly Lys Arg Lys Thr Ser
125      580      585      590
127 Glu Gln Gly Val Leu Ser Asp Ser Asn Thr Arg Ser Glu Arg Gln Lys
128      595      600      605
130 Lys Arg Met Tyr Tyr Gly Gly His Ser Leu Glu Glu Asp Leu Glu Trp
131      610      615      620
133 Ser Glu Pro Gln Ile Lys Asp Ser Gly Val Asp Thr Cys Ser Ser Thr
134 625      630      635      640
136 Thr Leu Asn Glu Glu His Ser His Ser Asp Lys His Pro Val Thr Trp

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/617,099

DATE: 07/27/2000  
 TIME: 09:41:10

Input Set : A:\Sequence Listing.txt  
 Output Set: N:\CRF3\07272000\I617099.raw

```

137          645          650          655
139 Gln Pro Ser Lys Asp Gly Asp Arg Leu Ile Gly Arg Ile Leu Leu Asn
140          660          665          670
142 Lys Arg Leu Lys Asp Gly Ser Val Pro Arg Asp Ser Gly Ala Met Leu
143          675          680          685
145 Gly Leu Lys Val Val Gly Gly Lys Met Thr Glu Ser Gly Arg Leu Cys
146          690          695          700
148 Ala Phe Ile Thr Lys Val Lys Lys Gly Ser Leu Ala Asp Thr Val Gly
149 705          710          715          720
151 His Leu Arg Pro Gly Asp Glu Val Leu Glu Trp Asn Gly Arg Leu Leu
152          725          730          735
154 Gln Gly Ala Thr Phe Glu Glu Val Tyr Asn Ile Ile Leu Glu Ser Lys
155          740          745          750
157 Pro Glu Pro Gln Val Glu Leu Val Val Ser Arg Pro Ile Gly Asp Ile
158          755          760          765
160 Pro Arg Ile Pro Asp Ser Thr His Ala Gln Leu Glu Ser Ser Ser Ser
161          770          775          780
163 Ser Phe Glu Ser Gln Lys Met Asp Arg Pro Ser Ile Ser Val Thr Ser
164 785          790          795          800
166 Pro Met Ser Pro Gly Met Leu Arg Asp Val Pro Gln Phe Leu Ser Gly
167          805          810          815
169 Gln Leu Ser Ile Lys Leu Trp Phe Asp Lys Val Gly His Gln Leu Ile
170          820          825          830
172 Val Thr Ile Leu Gly Ala Lys Asp Leu Pro Ser Arg Glu Asp Gly Arg
173          835          840          845
175 Pro Arg Asn Pro Tyr Val Lys Ile Tyr Phe Leu Pro Asp Arg Ser Asp
176          850          855          860
178 Lys Asn Lys Arg Arg Thr Lys Thr Val Lys Lys Thr Leu Glu Pro Lys
179 865          870          875          880
181 Trp Asn Gln Thr Phe Ile Tyr Ser Pro Val His Arg Arg Glu Phe Arg
182          885          890          895
184 Glu Arg Met Leu Glu Ile Thr Leu Trp Asp Gln Ala Arg Val Arg Glu
185          900          905          910
187 Glu Glu Ser Glu Phe Leu Gly Glu Ile Leu Ile Glu Leu Glu Thr Ala
188          915          920          925
190 Leu Leu Asp Asp Glu Pro His Trp Tyr Lys Leu Gln Thr His Asp Val
191          930          935          940
193 Ser Ser Leu Pro Leu Pro Arg Pro Ser Pro Tyr Leu Pro Arg Arg Gln
194 945          950          955          960
196 Leu His Gly Glu Ser Pro Thr Arg Arg Leu Gln Arg Ser Lys Arg Ile
197          965          970          975
199 Ser Asp Ser Glu Val Ser Asp Tyr Asp Cys Glu Asp Gly Val Gly Val
200          980          985          990
201 Val Ser Asp Tyr Arg His Asn Gly Arg Asp Leu Gln Ser Ser Thr Leu
203          995          1000          1005
205 Ser Val Pro Glu Gln Val Met Ser Ser Asn His Cys Ser Pro Ser Gly
206          1010          1015          1020
208 Ser Pro His Arg Val Asp Val Ile Gly Arg Thr Arg Ser Trp Ser Pro
209 1025          1030          1035          1040

```

## RAW SEQUENCE LISTING

DATE: 07/27/2000

PATENT APPLICATION: US/09/617,099

TIME: 09:41:10

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07272000\I617099.raw

```

211 Ser Ala Pro Pro Pro Gln Arg Asn Val Glu Gln Gly His Arg Gly Thr
212                               1045                               1050                               1055
214 Arg Ala Thr Gly His Tyr Asn Thr Ile Ser Arg Met Asp Arg His Arg
215                               1060                               1065                               1070
217 Val Met Asp Asp His Tyr Ser Ser Asp Arg Asp Arg Asp Cys Glu Ala
218                               1075                               1080                               1085
220 Ala Asp Arg Gln Pro Tyr His Arg Ser Arg Ser Thr Glu Gln Arg Pro
221                               1090                               1095                               1100
223 Leu Leu Glu Arg Thr Thr Thr Arg Ser Arg Ser Ser Glu Arg Pro Asp
224 1105                               1110                               1115                               1120
226 Thr Asn Leu Met Arg Ser Met Pro Ser Leu Met Thr Gly Arg Ser Ala
227                               1125                               1130                               1135
229 Pro Pro Ser Pro Ala Leu Ser Arg Ser His Pro Arg Thr Gly Ser Val
230                               1140                               1145                               1150
232 Gln Thr Ser Pro Ser Ser Thr Pro Gly Thr Gly Arg Arg Gly Arg Gln
233                               1155                               1160                               1165
235 Leu Pro Gln Leu Pro Pro Lys Gly Thr Leu Glu Arg Ser Ala Met Asp
236 1170                               1175                               1180
238 Ile Glu Glu Arg Asn Arg Gln Met Lys Leu Asn Lys Tyr Lys Gln Val
239 1185                               1190                               1195                               1200
241 Ala Gly Ser Asp Pro Arg Leu Glu Gln Asp Tyr His Ser Lys Tyr Arg
242                               1205                               1210                               1215
244 Ser Gly Trp Asp Pro His Arg Gly Ala Asp Thr Val Ser Thr Lys Ser
245                               1220                               1225                               1230
247 Ser Asp Ser Asp Val Ser Asp Val Ser Ala Val Ser Arg Thr Ser Ser
248                               1235                               1240                               1245
250 Ala Ser Arg Phe Ser Ser Thr Ser Tyr Met Ser Val Gln Ser Glu Arg
251 1250                               1255                               1260
253 Pro Arg Gly Asn Arg Lys Ile Ser Val Phe Thr Ser Lys Met Gln Asn
254 1265                               1270                               1275                               1280
256 Arg Gln Met Gly Val Ser Gly Lys Asn Leu Thr Lys Ser Thr Ser Ile
257                               1285                               1290                               1295
259 Ser Gly Asp Met Cys Ser Leu Glu Lys Asn Asp Gly Ser Gln Ser Asp
260                               1300                               1305                               1310
262 Thr Ala Val Gly Ala Leu Gly Thr Ser Gly Lys Lys Arg Arg Ser Ser
263                               1315                               1320                               1325
265 Ile Gly Ala Lys Met Val Ala Ile Val Gly Leu Ser Arg Lys Ser Arg
266 1330                               1335                               1340
268 Ser Ala Ser Gln Leu Ser Gln Thr Glu Gly Gly Gly Lys Lys Leu Arg
269 1345                               1350                               1355                               1360
271 Ser Thr Val Gln Arg Ser Thr Glu Thr Gly Leu Ala Val Glu Met Arg
272                               1365                               1370                               1375
274 Asn Trp Met Thr Arg Gln Ala Ser Arg Glu Ser Thr Asp Gly Ser Met
275                               1380                               1385                               1390
277 Asn Ser Tyr Ser Ser Glu Gly Asn Leu Ile Phe Pro Gly Val Arg Leu
278 1395                               1400                               1405
280 Ala Ser Asp Ser Gln Phe Ser Asp Phe Leu Asp Gly Leu Gly Pro Ala
281 1410                               1415                               1420
283 Gln Leu Val Gly Arg Gln Thr Leu Ala Thr Pro Ala Met Gly Asp Ile

```

## RAW SEQUENCE LISTING

DATE: 07/27/2000

PATENT APPLICATION: US/09/617,099

TIME: 09:41:10

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07272000\I617099.raw

284 1425 1430 1435 1440  
 286 Gln Val Gly Met Met Asp Lys Lys Gly Gln Leu Glu Val Glu Ile Ile  
 287 1445 1450 1455  
 289 Arg Ala Arg Gly Leu Val Val Lys Pro Gly Ser Lys Thr Leu Pro Ala  
 290 1460 1465 1470  
 292 Pro Tyr Val Lys Val Tyr Leu Leu Asp Asn Gly Val Cys Ile Ala Lys  
 E--> 293 1475 1780/1480 1485  
 295 Lys Lys Thr Lys Val Ala Arg Lys Thr Leu Glu Pro Leu Tyr Gln Gln  
 296 1490 1495 1500  
 298 Leu Leu Ser Phe Glu Glu Ser Pro Gln Gly Arg Val Leu Gln Ile Ile  
 299 1505 1510 1515 1520  
 301 Val Trp Gly Asp Tyr Gly Arg Met Asp His Lys Ser Phe Met Gly Val  
 302 1525 1530 1535  
 304 Ala Gln Ile Leu Leu Asp Glu Leu Glu Leu Ser Asn Met Val Ile Gly  
 305 1540 1545 1550  
 307 Trp Phe Lys Leu Phe Pro Pro Ser Ser Leu Val Asp Pro Thr Ser Ala  
 308 1555 1560 1565  
 310 Pro Leu Thr Arg Arg Ala Ser Gln Ser Ser Leu Glu Ser Ser Thr Gly  
 311 1570 1575 1580  
 313 Pro Ser Tyr Ser Arg Ser  
 314 1585 1590  
 744 <210> SEQ ID NO: 5  
 745 <211> LENGTH: 16  
 746 <212> TYPE: PRT  
 747 <213> ORGANISM: Mus musculus  
 749 <400> SEQUENCE: 5  
 750 Gln Met Ser His Arg Leu Glu Pro Arg Arg Pro  
 E--> 751 1 5 10

*011 last sequence in file*

VERIFICATION SUMMARY                      DATE: 07/27/2000  
PATENT APPLICATION:    US/09/617,099        TIME: 09:41:11

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\07272000\I617099.raw

L:8 M:270 C: Current Application Number differs, Replaced Current Application No  
L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:8 M:283 W: Missing Blank Line separator, <160> field identifier  
L:293 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
L:696 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2  
L:751 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5  
L:751 M:252 E: No. of Seq. differs, <211>LENGTH:Input:16 Found:11 SEQ:5  
L:8 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (4) Counted (5)